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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,971	08/31/2001	Satish Amara	01-471	1608

7590   04/12/2005

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EXAMINER
DAVIS, CYNTHIA L

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-18_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-18_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _31 August 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _2/4/2002_.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.   Claims 1-11, 13-14, and 16-18 are rejected under 35 U.S.C. 102(e) as being

anticipated by Rao.

Regarding claim 1, an ingress module including a LAC is disclosed in Rao,

column 23, line 53 (L2TP inherently includes a LAC; see Pierce, column 18, lines 1-2).

The ingress module receiving a plurality of packets of information from a first network,

the ingress module determining the type of each of the plurality of packets is disclosed

in column 23, lines 63-66 and column 26, lines 24-25. A route server module coupled to

the ingress module, the route server module sending a distributed processing request to

the ingress module is disclosed in column 4, line 7 and column 26, lines 22-27 (the

route server is a type of application; the registration is the distributed processing

request). Wherein the ingress module receives the distributed processing request and,

responsively, performs a first set of processing operations on selected ones of the

plurality of packets, the selected ones of the plurality of packets being of a first type, and

wherein the ingress module forwards others of the plurality of packets of information to

the route server module, each of the others of the plurality of packets being of a type

distinct from the first type; and wherein said route server module receives the others of

the plurality of packets of information and performs a second set of processing

operations on the others of the plurality of packets of information is disclosed in column 26, lines 22-35 (the various ingress applications, and the receiver functions, perform processing on the incoming packets that are forwarded to them in response to registration).

Regarding claim 6, receiving a plurality of packets of information from a first network at an ingress module, the ingress module including a LAC is disclosed in Rao, column 23, line 53 (L2TP inherently includes a LAC; see Pierce, column 18, lines 1-2). Determining the type of each of the plurality of packets is disclosed in column 23, lines 63-66 and column 26, lines 24-25. Sending a distributed processing request from a route server module to the ingress module is disclosed in column 4, line 7 and column 26, lines 22-27 (the route server is a type of application; the registration is the distributed processing request). Receiving the distributed processing request at the ingress module and, responsively, performing a first set of processing operations on selected ones of the plurality of packets, the selected ones of the plurality of packets being of a first type; forwarding others of the plurality of packets of information from the ingress module to the route server module, each of the others of the plurality of packets being of a type distinct from the first type; and receiving the others of the plurality of packets of information at the route server module and performing a second set of processing operations on the others of the plurality of packets of information at the route server module is disclosed in column 26, lines 22-35 (the various ingress applications, and the receiver functions, perform processing on the incoming packets that are forwarded to them in response to registration).

Regarding claim 16, means for receiving a plurality of packets of information from a first network at an ingress module; means for determining the type of each of the plurality of packets is disclosed in column 23, lines 63-66 and column 26, lines 24-25. Means for sending a distributed processing request from a route server module to the ingress module is disclosed in column 4, line 7 and column 26, lines 22-27 (the route server is a type of application; the registration is the distributed processing request). Means for receiving the distributed processing request at the ingress module and, responsively, performing a first set of processing operations on selected ones of the plurality of packets, the selected ones of the plurality of packets being of a first type; means for forwarding others of the plurality of packets of information from the ingress module to the route server module, each of the others of the plurality of packets being of a type distinct from the first type; and means for receiving the others of the plurality of packets of information at the route server module and performing a second set of processing operations on the others of the plurality of packets of information at the route server module is disclosed in column 26, lines 22-35 (the various ingress applications, and the receiver functions, perform processing on the incoming packets that are forwarded to them in response to registration).

Regarding claim 17, a computer readable medium having stored therein instructions for causing a processing unit to execute the following method is disclosed in column 29, line 50-51. Receiving a plurality of packets of information from a first network at an ingress module; determining the type of each of the plurality of packets is disclosed in column 23, lines 63-66 and column 26, lines 24-25. Sending a distributed

processing request from a route server module to the ingress module is disclosed in column 4, line 7 and column 26, lines 22-27 (the route server is a type of application; the registration is the distributed processing request). Receiving the distributed processing request at the ingress module and, responsively, performing a first set of processing operations on selected ones of the plurality of packets, the selected ones of the plurality of packets being of a first type; forwarding others of the plurality of packets of information from the ingress module to the route server module, each of the others of the plurality of packets being of a type distinct from the first type; and receiving the others of the plurality of packets of information at the route server module and performing a second set of processing operations on the others of the plurality of packets of information at the route server module is disclosed in column 26, lines 22-35 (the various ingress applications, and the receiver functions, perform processing on the incoming packets that are forwarded to them in response to registration).

Regarding claim 18, a computer program for processing packets is disclosed in column 29, line 50-51. Receiving a plurality of packets of information from a first network at an ingress module; determining the type of each of the plurality of packets is disclosed in column 23, lines 63-66 and column 26, lines 24-25. Sending a distributed processing request from a route server module to the ingress module is disclosed in column 4, line 7 and column 26, lines 22-27 (the route server is a type of application; the registration is the distributed processing request). Receiving the distributed processing request at the ingress module and, responsively, performing a first set of processing operations on selected ones of the plurality of packets, the selected ones of

the plurality of packets being of a first type; forwarding others of the plurality of packets

of information from the ingress module to the route server module, each of the others of

the plurality of packets being of a type distinct from the first type; and receiving the

others of the plurality of packets of information at the route server module and

performing a second set of processing operations on the others of the plurality of

packets of information at the route server module is disclosed in column 26, lines 22-35

(the various ingress applications, and the receiver functions, perform processing on the

incoming packets that are forwarded to them in response to registration).

Regarding claims 2 and 7, the first set of processing operations includes

forwarding the selected ones of the plurality of packets of information to an egress

module is disclosed in column 25, lines 63-column 26, line 6 (the GFI may forward to an

egress port).

Regarding claims 3 and 8, the second set of processing operations includes

establishing a connection with an entity on the Internet is disclosed in column 26, lines

30-32 (encapsulating and sending a packet to an output port would involve connecting

with an entity on the internet).

Regarding claims 4 and 9, the first type is a data type is disclosed in column 26,

lines 25-26 (packets received via the media ports would be differentiated by data type).

Regarding claims 5 and 10, an egress module, the egress module being coupled

to the ingress module, the egress module receiving the others of the plurality of packets,

the egress module routing the packets to the internet is disclosed in column 26, lines 2-

3.

Regarding claim 11, routing device comprising: an ingress portion, the ingress portion receiving negotiation packets is disclosed in column 8, line 38-39 of Rao (the connection manager would receive negotiation packets). A route server portion coupled to the ingress portion, the route server portion receiving the negotiation packets and completing a negotiation is disclosed in column 4, line 7. Including an LNS is disclosed in column 23, line 53 (L2TP inherently includes an LNS; see Pierce, column 18, lines 1-2). The route server portion sending a distributed switching request message to the ingress portion upon the completion of a negotiation is disclosed in column 4, line 7 and column 26, lines 22-27 (the route server is a type of application; the registration is the distributed processing request). Wherein the ingress portion receives the distributed switching request message and, responsively, sends a reply message to the route server portion; and wherein the ingress portion upon the receipt of the distributed forwarding message processes subsequently received data packets is disclosed in column 26, lines 22-35 (the various ingress applications, and the receiver functions, perform processing on the incoming packets that are forwarded to them in response to registration).

Regarding claim 13, the packets include labeling information and the ingress portion use the label information from the packet to determine an outgoing link is disclosed in column 26, lines 30-32 (routing information equivalent to labeling information; the packets are routed to an outgoing link).

Regarding claim 14, the ingress portion forwards all control packets to the route

server portion is disclosed in column 4, lines 7-8 (the route server controls network

management, so it would receive control packets).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rao in

view of Sanzi. The ingress portion determines a forwarding equivalence class is

missing from Rao. However, Sanzi discloses in column 4, line 64-column 5, line 3, that

an FEC is how an IP network that supports MPLS routes packets that all need to go to

the same destination. It would have been obvious to one skilled in the art at the time of

the invention to have the ingress portion determine an FEC. The motivation would be to

route the packets.

3.   Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rao in

view of Drwiega and Li. All MPLS LDP, CRLDP, or RSVP packets are routed to the

route server portion is missing from Rao. However, Rao does disclose in column 4,

lines 7-8, that the route server controls network management, so it would receive

control packets. Further, Drwiega discloses in column 2, lines 13-14 that CRDLP is a

type of signaling protocol, i.e., control packets. Also, Li discloses in column 14, lines 5-

6, that RSVP and LDP are known in the art as signaling protocols. It would have been

obvious to one skilled in the art at the time of the invention to send all MPLS LDP, CRDLP, or RSVP packets to the route server. The motivation would be to let the route server deal with all control packets, and centrally control the network management.
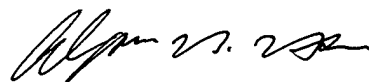
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia L Davis whose telephone number is (571) 272-3117. The examiner can normally be reached on 8:30 to 6, Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CLD   *CLD*
3/15/2005   *3/15/05*

ALPUS H. HSU
PRIMARY EXAMINER